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EXAMINER
MAHMOUDI, HASSAN

ART UNIT	PAPER NUMBER
2175	

DATE MAILED: 07/31/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on _____ .

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _1-19_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _1-19_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All b)☐ Some * c)☐ None of:

      1.☒ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

DOV POPOVICI
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _4_ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2. Claims 1, 4-5, 7, 10-11, 13, 16-17, and 19 are rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Komori</u> (U.S. Patent No. 4,602,333) in view of <u>Yamaguchi et al</u> (U.S.

Patent No. 4,949,287.)

As to claim 1, <u>Komori</u> teaches an image storage (see Abstract) method comprising:

the image storage step of continuously storing a plurality of image data (see column 2,

lines 15-20) in a first area of a single file (see column 4, lines 62-63, and see column 6, lines

24-25.); and

the information storage step of storing information to a source outside the file which

pertains to each of the plurality of image data stored in the image storage step (see column 6,

lines 13-25), in a storage order of the plurality of image data in a second area of the file (see

column 6, lines 29-38.)

<u>Komori</u> does not teach storing reference information.

Yamaguchi et al teaches a document processing system for laying out of image data (see

Abstract), in which he teaches storing reference information (see column 2, lines 3-22, and

column 3, lines 35-40.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Komori to include storing reference

information.

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Komori by the teaching of Yamaguchi et al, because

storing the image reference information would enable the user to create reference files for the

stored images, where he would be able to access, retrieve, and update the stored reference

information without having to access the stored images.

As to claim 4, Komori as modified teaches wherein the image storage step includes the

step of compressing and storing the plurality of image data (see Komori, column 2, lines 19-

20.)

As to claim 5, Komori as modified teaches wherein the reference information specifies

an image file name of an original of the image data stored in the first area (see Yamaguchi et

al, column 2, lines 12-15, where the "file name" can be presented by the "relationship"

described within the reference data".)

As to claim 7, Komori teaches an image storage apparatus (see Abstract) comprising:

image storage means for continuously storing a plurality of image data in a first area of a single file (see column 3, lines 3-10, and see column 4, lines 62-63); and

information storage means for storing information to a source outside the file, which pertains to each of the plurality of image data stored by the image storage means (see column 6, lines 13-25), in a storage order of the plurality of image data in a second area of the file (see column 6, lines 29-38.)

Komori does not teach storing reference information.

Yamaguchi et al teaches a document processing system for laying out of image data (see Abstract), in which he teaches storing reference information (see column 2, lines 3-22, and column 3, lines 35-40.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori to include storing reference information.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori by the teaching of Yamaguchi et al, because storing the image reference information would enable the user to create reference files for the stored images, where he would be able to access, retrieve, and update the stored reference information without having to access the stored images.

As to claim 10, <u>Komori</u> as modified teaches wherein the image storage means

compresses and stores the plurality of image data (see <u>Komori</u>, column 2, lines 19-20.)

As to claim 11, <u>Komori</u> as modified teaches wherein the reference information specifies

an image file name of an original of the image data stored in the first area (see <u>Yamaguchi et</u>

<u>al</u>, column 2, lines 12-15, where the "file name" can be presented by the "relationship"

described within the reference data".)

As to claim 13, <u>Komori</u> teaches a storage medium for storing an image data file (see

column 3, lines 3-10, where "storage medium" is read on "storage device"), the image data

file comprising:

a first area which continuously stores a plurality of image data (see column 4, lines 62-

63); and

a second area (see column 4, lines 63-64) which stores information to a source outside the

file, which pertains to each of the plurality of image data stored in the first area (see column

6, lines 13-25), in a storage order of the plurality of image data (see column 6, lines 29-38.)

<u>Komori</u> does not teach storing reference information.

<u>Yamaguchi et al</u> teaches a document processing system for laying out of image data (see

Abstract), in which he teaches storing reference information (see column 2, lines 3-22, and

column 3, lines 35-40.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Komori</u> to include storing reference information.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified <u>Komori</u> by the teaching of <u>Yamaguchi et al</u>, because storing the image reference information would enable the user to create reference files for the stored images, where he would be able to access, retrieve, and update the stored reference information without having to access the stored images.

As to claim 16, <u>Komori</u> as modified teaches wherein the image data file stored in the first area is compressed (see <u>Komori</u>, column 2, lines 19-20.)

As to claim 17, <u>Komori</u> as modified teaches wherein the reference information specifies an image file name of an original of the image data stored in the first area (see <u>Yamaguchi et al</u>, column 2, lines 12-15, where the "file name" can be presented by the "relationship" described within the reference data".)

As to claim 19, <u>Komori</u> teaches a storage medium (see column 2, lines 24-25) for storing a control program (see column 2, lines 28) for making a computer implement generation and storage of an image data file, the control program comprising:

a code (see Abstract. It is inherent that an image processing system and apparatus consists of code/program) of the image storage step of continuously storing a plurality of

image data in a first area of a single file (see column 4, lines 62-63, and column 6, lines 24-25); and

a code (see Abstract. It is inherent that an image processing system and apparatus consists of code/program) of the information storage step of storing information to a source outside the file, which pertains to each of the plurality of image data stored in the image storage step (see column 6, lines 13-25, in a storage order of the plurality of image data in a second area of the file (see column 6, lines 29-38.)

Komori does not teach storing reference information.

Yamaguchi et al teaches a document processing system for laying out of image data (see Abstract), in which he teaches storing reference information (see column 2, lines 3-22, and column 3, lines 35-40.)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori to include storing reference information.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori by the teaching of Yamaguchi et al, because storing the image reference information would enable the user to create reference files for the stored images, where he would be able to access, retrieve, and update the stored reference information without having to access the stored images.

3. Claims 2-3, 6, 8-9, 12, 14-15, and 18 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Komori (U.S. Patent No. 4,602,333) in view of Yamaguchi et al (U.S.

Patent No. 4,949,287) as applied to claims 1, 4-5, 7, 10-11, 13, 16-17 and 19 above, and

further in view of Kurakake et al (U.S. Patent No. 6,078,005.)

As to claim 2, Komori as modified does not teach the method further comprising the

feature amount storage step of assuring a third area in the file, and storing feature amount

data corresponding to the image data stored in the first area in the storage order of the

plurality of image data.

Kurakake et al teaches an apparatus for producing multi-media events (see Abstract), in

which he teaches the feature amount storage step of assuring a third area in the file, and

storing feature amount data corresponding to the image data stored in the first area in the

storage order of the plurality of image data (see figure 3(b) and see column 7, lines 24-43,

where "feature amount" is read on "feature property".)

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified Komori as modified, to include the feature

amount storage step of assuring a third area in the file, and storing feature amount data

corresponding to the image data stored in the first area in the storage order of the plurality of

image data.

It would have been obvious to a person having ordinary skill in the art at the time the

invention was made to have modified Komori as modified, by the teaching of Kurakake et al,

because including the feature amount storage step of assuring a third area in the file, and

storing feature amount data corresponding to the image data stored in the first area in the

storage order of the plurality of image data would enable the user to store the feature amounts

and property information associated with images along with (but separate from) the images

according to the order in which images are stored, in order to increase the speed of image

searching and be able to access the feature amounts associated with the image after searching

for an locating the desired image.

As to claim 3, <u>Komori</u> as modified teaches the method further comprising the header

information storage step of assuring a fourth area in the file, and storing header information

including boundary, position information between the first and second areas (see <u>Kurakake et</u>

<u>al</u>, column 7, line 59 through column 4, line 6.)

As to claim 6, <u>Komori</u> as modified teaches wherein the image storage step includes the

step of storing one or a plurality of frame images extracted from moving image data in the

first area (see <u>Kurakake et al</u>, column 5, lines 26-33), and

the reference information storage step includes the step of storing information that

specifies moving image data corresponding to each frame image stored in the first area and a

frame position thereof as the reference information in the second area (see <u>Kurakake et al</u>,

column 5, line 57 through column 6, line 3.)

As to claim 8, <u>Komori</u> as modified does not teach the apparatus further comprising

feature amount storage means for assuring a third area .in the file, and storing feature amount

data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

Kurakake et al teaches an apparatus for producing multi-media events (see Abstract), in which he teaches feature amount storage means for assuring a third area in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data (see figure 3(b) and see column 7, lines 24-43, where "feature amount" is read on "feature property".)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori as modified, to include feature amount storage means for assuring a third area in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori as modified, by the teaching of Kurakake et al, because including feature amount storage means for assuring a third area in the file, and storing feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data would enable the user to store the feature amounts and property information associated with images along with (by separate from) the images according to the order in which images are stored, in order to increase the speed of image searching and be able to access the feature amounts associated with the image after searching for an locating the desired image.

As to claim 9, <u>Komori</u> as modified teaches the apparatus further comprising header

information storage means for assuring a fourth area in the file, and storing header

information including boundary position information between the first and second areas (see

<u>Kurakake et al</u>, column 7, line 59 through column 4, line 6.)

As to claim 12, <u>Komori</u> as modified teaches wherein the image storage means stores one

or a plurality of frame images extracted from moving image data in the first area (see

<u>Kurakake et al</u>, column 5, lines 26-33), and

the reference information storage means stores information that specifies moving image

data corresponding to each frame image stored in the first area and a frame position thereof

as the reference information in the second area (see <u>Kurakake et al</u>, column 5, line 57 through

column 6, line 3.)

As to claim 14, <u>Komori</u> as modified does not teach wherein the image data file further

comprises a third area which stores feature amount data corresponding to the image data

stored in the first area in the storage order of the plurality of image data.

<u>Kurakake et al</u> teaches an apparatus for producing multi-media events (see Abstract), in

which he teaches a third area which stores feature amount data corresponding to the image

data stored in the first area in the storage order of the plurality of image data (see figure 3(b)

and see column 7, lines 24-43, where "feature amount" is read on "feature property".)

Therefore, it would have been obvious to a person having ordinary skill in the art at the

time the invention was made to have modified <u>Komori</u> as modified, to include wherein the

image data file further comprises a third area which stores feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to have modified Komori as modified, by the teaching of Kurakake et al, because including the image data file further comprising a third area which stores feature amount data corresponding to the image data stored in the first area in the storage order of the plurality of image data would enable the user to store the feature amounts and property information associated with images along with (but separate from) the images according to the order in which images are stored, in order to increase the speed of image searching and be able to access the feature amounts associated with the image after searching for an locating the desired image.

As to claim 15, Komori as modified teaches wherein the image data file further comprises a fourth area which stores header information including boundary position information between the first and second areas (see Kurakake et al, column 7, line 59 through column 4, line 6.)

As to claim 18, Komori as modified teaches wherein the first area stores one or a plurality of frame images extracted from moving image data (see Kurakake et al, column 5, lines 26-33), and

the second area stores information that specifies moving image data corresponding to each frame imaged stored in the first area and a frame position thereof as the reference information (see Kurakake et al, column 5, line 57 through column 6, line 3.)

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The following patents are cited to further show the state of art with respect to methods and systems of image communications, image processing, and image storage/retrieval in general:

U.S. Patent No. 5,585,944 to Rodriguez.

U.S. Patent No. 4,553,206 to Smutek et al.

U.S. Patent No. 5,461,682 to Nomura.

5. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Tony Mahmoudi whose telephone number is (703) 305-4887. The examiner can normally be reached on Mondays-Fridays from 08:00 am to 04:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dov Popovici, can be reached at (703) 305-3830.

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July 16, 2002

DOV POPOVICI

SUPERVISORY PATENT EXAMINER

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